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ABSTRACT

A study of the training opportunities of high school graduates (about 825,000 in 1988) who work immediately after leaving school identified which members of that group get trained, by whom, and with what earnings consequences, based on the experiences of a sample of graduates from their graduation in 1972 until 1986. The following are among the findings: (1) employer-provided training is not an alternative to formal education for acquiring productive skills because work-bound youth receive less training than either non-degree participants or college-bound youth; (2) work-bound youth who receive employer-provided training have substantially higher earnings than those who do not; (3) the public sector employs a much smaller percentage of work-bound youth than does the private sector but is more likely to educate or train them; (4) men and women in the private sector are likely to report equal participation in training, but women report the duration of their training to be only three-fourths or one-half that of men's; and (5) public sector women are less likely to participate in training than public sector men. Altering public or private policy to correct these inequities is not recommended. Before taking a corrective step, policy makers should decide whether additional training would improve the productivity of work-bound youth, whether it is possible to design training programs to compensate for their educational deficiencies, and how can strategies be developed to optimize female employees' productivity with the restraints they have as primary caretakers of children. (11 references) (CML)

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43. EMPLOYER TRAINING OF WORK-BOUND YOUTH: AN HISTORICAL REVIEW AND NEW RESULTS

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Introduction

In 1988, 2.7 million young people graduated from high school. Fifty eight percent decided to enroll in college, but most of the remaining 1.1 million began their transition to work. One fourth of these work-bound youth do not immediately find work, indicating some difficulty in making the transition. The remaining three fourths, although working, may or may not be found in a job which includes training opportunities or fosters their productivity as workers. This paper addresses questions about the training opportunities and experiences of this important group.

We first describe work-bound youth; that is, individuals who leave high school with the intent of going to work and, at least in the immediate future, do not attend a college or vocational school on a full-time basis. Following the description, we explain how historically this group of young adults has been trained in our society and what has happened to traditional sources of training. In the third section, we take a closer look at who gets training, who provides it, and its consequence for earnings by examining the education, training, and employment experiences of a sample of high school seniors from their



graduation in 1972 until 1986. We describe the type, form and source of employer-provided training they received. The last section of the paper raises appropriate policy questions.

A Statistical Profile of Youth

There is a deep national concern about youth who drop out of school, but not enough interest in young adults who, for a variety of reasons, choose not to go on to college immediately after high school graduation. Recently, a report entitled, "The Forgotten Half," focused attention on these individuals, and emphasized the fact that they are a sizable and important part of our population. As large numbers of young women and men make the transition from school to work, the market becomes the first testing place of the products of our schools. We now give a quick statistical portrait of this group.

Today's young people have grown up in more turbulent circumstances than they did in the past:

- o The proportion of children involved in a divorce doubled between 1965 and 1980 (Youth Indicators, 1988, p. 10).
- o The suicide rate among 15- to 19-year-olds increased from 4 per 100,000 in 1965 to 10 per 100,000 in 1985 (Youth Indicators, 1988, p. 102).
- o The number of births among unmarried white 15- to 19-year-old girls increased from 7.9 to 20.5 per 1,000 between 1965 and 1985.
- o Among blacks, the number of births per 1,000 unmarried 15- to 19year old girls was 79.4 in 1985, about the same as it was in 1965.



- o In 1985, 43 percent of all black children 18 and under lived in poverty (Wetzel, 1988).
- o Fifty six percent of black youth live in central city areas where school dropout rates are much higher than the 20 percent national estimate in 1983.

The educational attainment of new generations of young people rose throughout the post-war period, with the exception of a slowdown during the first half of the 70s. However, the educational achievement of today's high school students, as measured by the National Assessment of Educational Progress, has remained at the same low levels of the early 1970s (Condition of Education, 1990). Employers are able to tell, more than ever before, the basic skill deficiencies of young workers since most jobs require some training or orientation to perform even the simplest tasks (Berlin and Sum, 1988).

The transition from high school to work (or college) is never easy, but for some members of our society it is particularly difficult. Work-bound high school graduates fare better than high school dropouts, but have substantial difficulties compared to their college-going classmates.

As a basis for comparison, it is useful to consider the number of dropouts and their employment prospects. Table 1 presents the number of young people graduating and dropping out of high school. In 1988, for every high school student who dropped out, five graduated. Almost three of the five would go on to college, but the remaining two would enter



Table 1. Employment of High School Graduates and Dropouts

				
1988 High School	All Races Number (1,000s)	Employed (percent)	Black Number (1,000s)	Employed (percent)
Graduates	2,673		382	
Not enrolled in college	1,098	72	211	55
1987-88 Dropouts	552	43	107	23
1978 High School Graduates	3,161		347	
Not enrolled in college	1,577	74	186	46
1977-78 Dropouts	822	40	172	40

Source: U.S. Department of Labor, 1989 and 1979.

the workforce. Only 43 percent of the dropouts found work. Similarly, for every black high school student who dropped out, four graduated, and almost two would go on to college. Only 23 percent of the black dropouts found jobs, and one in four of these jobs were part-time.

Another 16 percent were looking for work, but an astonishing 61 percent were doing neither.

In some ways, these rates are better than what occurred in 1978. In that year, for every high school student who dropped out, only four graduated. The ratio for black students was far worse, with only two graduates for every dropout. On the other hand, 40 percent of black high school dropout were employed, better than the current 23 percent. Since 1978, the number of dropouts has fallen relative to the number of



graduates, but the proportion of the remaining dropouts employed have also fallen. Today's dropouts, particularly black dropouts, are those who appear to have the least success in making the transition to work.

At the other end of the line of young people, the fraction of high school graduates going straight to college has increased from 50 to 59 percent between 1978 and 1988. We do not know the types of postsecondary institutions attended by the high school class of 1988; but among 1980 seniors, 31 percent enrolled in a 4-year colleges, and 15 percent in 2-year colleges immediately following graduation (U.S. Department of Education, 1987a, p. 80).

On the other hand, the number of high school graduates not going on to college has decreased. From 1978 to 1988 the proportion fell from 50 to 41 percent. For blacks it has remained near 55 percent. A few, about 1 in 10, enroll in a vocational school, but most seek work. In 1988, 72 percent of work-bound high school graduates had work in the October following their graduation. Among work-bound black high school graduates the proportion with jobs improved from 46 to 55 percent between 1978 and 1988. About one in four high school graduates who are not gring on to college do not find work immediately. About one in two black graduates do not. Fifteen percent of all recent graduates who are working are in part-time jobs.

The median income for young male and female, full-time workers declined between 1970 and 1986 after adjustment for inflation. In 1986, young males between the ages of 20-24, who had high school diplomas and had jobs earned 28 percent less in constant dollars than the comparable group of youth in 1973. The income drop was 44 percent for blacks, as

opposed to 24 percent for whites. The decline was even sharper for dropouts.

Employers state that new work-bound high school graduates are not qualified for even the lowest level jobs, and that the high school diploma is no longer certification of competency in the basic skills (Sherman, 1983; Eurich, 1985). However, employers still use it as a minimum educational standard for new workers, and continue to reward high school graduates with higher wages than dropouts (Borus, 1984). The diploma may nevertheless illustrate an individual's ability to complete a course of action and to cope with the rules of an institution, both of which are workplace requirements. Indeed, according to a recent study conducted by J. H. Laurence for the Defense Department, "screening on the basis of an education credential is the most efficient and effective method existing today to curb attrition" (Laurence, 1987).

Each year roughly 1 million young people will graduate from high school and try to begin their lives as workers. There are disturbing signs that they may have major difficulties finding a job, remaining with it, and being productive. As information and technology become increasingly important in the U.S. economy, so does the education and training of its workers. Those without it are likely to find themselves with low earnings, jobs that don't last, and few new prospects. Their fate may well be analogous to that of * day's high school drop-outs.

The U.S. postsecondary education system is large, diverse, and provides a wealth of opportunities. It provides young people with the chance to experiment, to find what it is they enjoy, what they would



like to learn, and ultimately how to turn that learning to productive use in our diverse economy. Some of those experiments will fail, but those young people are free to try again. However, the opportunities offered by traditional postsecondary education may not be useful to all high school graduates. For many, high school was a struggle, and the thought of more time spent in the classroom is not attractive.

Many learn better on the job or when the skills being taught have a concrete and clear connection to a work task. Job training may be more suited to their needs than additional traditional education, but in all cases, job training should be built on a solid foundation of basic skills. Current policies need to be changed to encourage additional education and training for these work-bound youths.

However, before we look for answers, it is important that we understand how work-bound youth in the past made the transition from school to work. What type of institutions or programs existed in the past? What nonwork structures existed in society that enabled youth to learn skills and work habits?

Origins of Occupational Training

For most of the 19th century, schools played a rather minor role in preparing youth for specific occupations. Most urban youths went to school for 4 or 5 years, usually leaving school by age 12 or 13 to receive occupational training through apprenticeships or on-the-job training (Kantor, 1982). Towards the end of the 19th century, pressure from businessmen, labor leaders, farm spokesmen, and educators forced the schools to respond to the demands of the economy. By 1910, it was



agreed that some form of vocational education was needed. Finally, in 1917, Congress passed the Smith-Hughes Act, allocating federal funds for vocational training "of less than college grade" in trade and industrial subjects, home economics, and agriculture for students over 14 years old enrolled in public schools. Advocates of vocational education argued that the result was "a transformed high school, in which fewer students dropped out from boredom or frustration. Pupils gained skills that made them more productive and well-paid workers, and the schools meshed with the economy as socially efficient institutions" (Kanter, 1982).

On the other hand, "opponents of the establishment of vocational schools voiced their concerns that a differentiated system of schooling sorted and trained individuals for their niches in the economy, and that businessmen turned to education as a means of socializing and disciplining employees to their new roles" (Kantor, 1982). However, we have to keep in mind that in the late 19th century and early 20th centuries, the economy was dominated by small enterprises, and most schools were one-room rural schools. Therefore, a majority of young adults acquired their training outside the school systems, namely through their families, apprenticeship programs, and simply by working. Let us briefly revie; some of the important sources of training.

Apprenticeship

Since the beginning of time, skills have been transferred from father to son. Teaching skills to youth through artisans goes back at least to the days of Hammurabi. During the Middle Ages, training took the form of indenture and the master-apprentice relationship.



Indenture, the contractual agreement between two people in which one, usually a craftsman, agreed to teach skills to another, usually a youth, was brought to the New World by craft workers. Unfortunately, this practice was corrupted by the "poor laws," this requiring poor children, many less than 10 years old, to serve their teacher for many more years than necessary to learn the skill.

The first legislation in the U.S. to promote an organized system of apprenticeship was enacted in Wisconsin in 1911, placed apprenticeship under an industrial commission, and required 5 hours a week of classroom instruction of each apprentice. Today's nationwide system came into being after the passage of the Fitzgerald Act 1937. The act promotes "the furtherance of labor standards necessary to safeguard the welfare of apprentices and to cooperate with the States in the promotion of such standards."

Most modern apprenticeships range from 3 to 5 years. Programs include planned on-the-job training in conjunction with related classroom instruction, generally 144 hours each year. Apprentices earn while they learn on the job, at progressive wage rates. More than 230,000 persons are registered as apprentices in more than 700 crafts and skills (U.S. Department of Labor, 1986). Requirements for entry vary from trade to trade, program to program, and plan to plan. However, they usually cover four factors: age, education, aptitude, and physical condition. Minimum age for an apprentice is 16 years, though most programs set the minimum age at 18, because of insurance restrictions. The minimum level of education also varies, but usually a high school diploma or its equivalent is required. Most apprenticeship

programs also expect applicants to pass appropriately validated aptitude tests. One such test is the Specific Aptitude Test Battery (SATB) administered by the state Employment Service agencies. If an individual meets all the above requirements, he or she gets on a register, but this constitutes only half of the process. The other half is being placed in a program. The wait on a register can last months or even years, depending on the number of qualified applicants and the number of openings.

While apprenticeship is believed to provide training for less than one percent of the work-bound youths who select that route as a means of acquiring skills, it is impossible to cite exact numbers of apprenticeships for two reasons. First, since 1979, the Employment and Training Administration of the U.S. Department of Labor has stopped collecting data on the training status of registered apprentices. Second, it has been estimated that only about one-half of all apprenticeship programs are registered with Federal and State apprenticeship agencies.

Employer-Sponsored Training

Historically, employer-sponsored training has been narrowly defined and mostly of red to employees who were more likely to stay with the company. In the early 19th century, various work places attempted to provide education to the workers, as was done in the mills of Lowell, Massachusetts. During the latter part of that century, every educational institution in the U.S. was concerned with the development of programs that would be responsive to the industrial needs of the

Nation. It is at the turn of the century that corporations began setting up their training and education centers. From 35 corporations in 1913, the number of corporations with classrooms grew to 200 within a couple of years (Eurich, 1985).

In addition to the growth of corporate classrooms over the years, higher level employees have received a larger share of education and training (Lusterman, 1985). There is some evidence that employers invest heavily in management training for two reasons. They believe that investing in higher level employees has a bigger payoff than investing in entry-level workers. They also know that entry-level workers are more likely to move from one firm to another than are employees who have been with a firm 10 to 15 years (Vaughan & Berryman, 1989). Therefore, employer-sponsored education and training programs are not being provided for younger workers seeking entry-level career positions (Zemsky, Meyerson, Tierney, and Berg, 1983).

Public Training Programs

Historically, many training programs were initiated by the federal government in response to concerns over national skill shortages in the work force. The goal of the 1862 Merrill Land Grant College Act was to increase the supply of persons trained in agriculture and mechanical arts. The Vocational Rehabilitation Act of 1918 sought to provide training to World War I veterans. In both cases, the federal government policy was to use training programs to address manpower problems.

Later, the Civilian Conservation Corps (CCC) of the Roosevelt era became the prototype of federal training programs. The Work Progress



Administration was put in charge of programs that trained the unemployed for public sector activities.

Beginning in the 1950s, the federal government funded a number of training programs to meet, once again, the skill needs of workers in specific fields. The Health Amendments Act of 1956, for example, aimed at training military technicians. Eventually, the Manpower Development and Training Act (MDTA) was passed to ease unemployment. Although these acts were not primarily for young adults, by the mid-1960s, 18.3 percent of the participants were 19 years old or younger. The Economic Opportunity Act of 1964 enabled the establishment of Neighborhood Youth Corps and the Job Corps training programs for youth. In 1971, the federal government took the lead in creating jobs for the unemployed. With the passage of the Comprehensive Employment and Training Act (CETA) in 1973, and its re-authorization in 1978, 725,000 jobs were created. Legislative acts that followed the CETA were modifications of the original act with increased emphasis on youth and more involvement of the private sector.

The Job Corps, another attempt at training youths, gave way to the Job Training Partnership Act (JTPA) of 1982. The JTPA is the most recent attempt at addressing high youth unemployment through training for jobs that have been identified by private industry councils. Programs operating with JTPA funds have now begun to emphasize the importance of literacy and other basic educational skills.

A cursory review of manpower development acts reveals that some of these indeed created jobs and trained youth. Some even mandated collaboration between the public and private sectors. Still others



involved schools and communities in the education and training of youth.

However, the central problem -- the lack of trained workers to meet the needs of the economy -- remains unselved.

Educational Institutions

Before 1880 industrial education had little impact on the public schools and as late as 1888 only a few schools were primarily devoted to training for the trades. Although the movement for occupational education in the public schools developed slowly in America, many American colleges and universities had long proclaimed vocational objectives. The main burst of university support for popular vocational education occurred between 1900 and 1930 (Kett, 1988). Even in 1890 few people suspected the presence of widespread demand for vocational instruction in routine office and factory jobs. Most ordinary vocational skills had been learned on the job rather than in schools and, few public or private schools addressed occupational education for the masses. The first proprietary school was set up in the 1850s and served adult students in evening classes. By 1890s enrollments in these schools rose to over 90,000 students (Kett, 1989). Although some of these proprietary schools called themselves colleges, their basic function was to train workers for entry-level positions. In the 1880s and 1890s, there was a noticeable growth in the number of proprietary schools. Although they did not offer professional education, they did use innovative techniques for popular education, including instruction by mail. The International Correspondence Schools of Scranton became a large enterprise by the early 1900s, with one hundred thousand new

students enrolling each year. By 1910 the cumulative enrollments of ICS was one million and by 1930 it was over four million (Kett, 1989).

Today, these proprietary schools are for-profit and constitute a growing segment among providers of education. They are often organizations with a single curriculum, and they offer courses of short duration to enable students to acquire skills with a minimum loss of foregone income. Year-around operations and frequent class starts are the norm.

There are approximately 6000 proprietary schools including correspondence schools. Since these schools do not receive public funds, the tuition, on the whole, is expensive. The average cost of a proprietary school program in 1980-1981, was \$2,200 for an average of 981 hours of instruction, as opposed to an average cost of \$593 for an average of 1,324 hours of instruction in public non-college programs. The growth of these private proprietary schools raise public concern because students often finance their education through federal aid programs.

A Closer Look at Who Participates in Employer-Provided Training and its Consequence for Earnings¹

Are those non-college bound youth who find work participating in employer-provided training? Which employers are providing the training? What are the earnings consequences of the training? Answers to these questions may be found in the U.S. Department of Education's National Longitudinal Study of the High School Class of 1972 (NLS-72). As its name implies, this survey consists of a nationally representative sample



of high school seniors in 1972. The same sample of seniors was resurveyed on a regular basis until 1986 (U.S. Department of Education, 1981, 1987b). The results provide evidence about the education and employer-provided job training experiences of the 12,841 individuals who participated in the 1986 survey. In particular, the results allow us to contrast the participation in employer-provided training of the workbound to those who were either college-bound or non-degree participants in post-secondary education.²

All members of this sample are high school graduates, but not all went on to college or other forms of post-secondary education. Cver 60 percent indicated that they had at least some education beyond high school, and somewhat less than half of these finished college. This leaves 35-40 percent with no post-secondary education involvement at all. It is this group that compose the work-bound. Labor force participation among members of the class of 72 was high -- in 1986 93.7 percent of men and 74.9 percent of women reported holding a full-time job since 1979. The labor force participation rate was lowest among the work-bound, 80 percent, and highest among the college bound, 90 percent. Among the work-bound in the labor force 35 percent indicated they had participated in some form of employer-provided training on their last full-time job.

Individuals were more likely to report participation in employerprovided training if they had been in their job for a year or more. The
likelihood of participating in training increases from 13 percent for
those who just started a full-time job, to 29 percent for those who have
been in the job for less than a year, and to 37 percent for those who



have been in the job for more than a year.³ Evidently, most but not all training occurs within the first year on the job.⁴

A widely cited result is that those who have more education are more likely to receive training. This relationship holds in this sample but to a lesser extent than one might expect. As was indicated earlier, 37 percent of the work-bound sample with a year or more on the job eported participation in some form of employer-provided training. The comparable numbers for non-degree participants and the college-bound are 51 percent and 58 percent, respectively. Employers appear more likely to invest in training those who already have invested in educating themselves.

Women were somewhat more likely to report having participated in on-the-job training than men -- among the work-bound 38 percent women and 33 percent of men. However, the duration of training for women is much shorter -- 4.9 full-time week equivalents versus 11.5 for men.

Sixty-one percent of those employed in the public sector compared to 45 percent of those in the private sector participated in training. The difference between public and private employers was particularly large for the work-bound where 56 percent of those with public employers and 36 percent of those with private employers participated in some form of employer-provided training. In contrast, among the college bound 65 percent of the public sector and 57 percent of the private sector received training. For work-bound men, the differential was particularly large -- 61 percent and 33 percent, respectively, of those in public and private sector jobs participated in training.



Employer-provided training programs take many forms. The forms we were able to identify include (in order of overall frequency of incidence) (1) during working hours, on premises, (2) during working hours, off premises, (3) informal on-the-job training (OJT), (4) tuition and/or financial assistance for attending educational institutions after working hours, and (5) formal registered apprenticeships. About 23 percent of the work-bound with more than a year on the job reported participating in training during working hours, on premises. Only 13 percent reported participating in a training program off premises.

Some employers offer tuition and/or financial assistance for attending educational institutions after working hours. Among the college-bound, 15.7 percent reported receiving this type of assistance. Among the non-degree participants, the proportion is 13.8 percent, and among the work-bound, 23 percent.⁵

Clearly, the work-bound are less likely to participate in employer-provided training than the college bound, and the difference is larger in private firms. Although the public sector workforce is more educated than its private sector counterpart, the public sector is more likely to train its less educated members.

There is an earnings pay-off to training. Average earnings increase with educational level -- an average of \$404 and \$536 per week in 1925 for the work-bound and college-bound, respectively. Within educational classes, those in private sector jobs earn more than those in the public sector. For the work-bound average earnings in the private and public sectors are \$392 and \$364 per week, respectively. 6 However, within each sector those who have received training earn more

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than those who have not. In the private sector, the numbers for the work-bound are \$407 and \$383 for those with and without employer-provided training, a 6.3 percent differential. In the public sector the amounts for the work-bound are \$394 and \$326 for those with and without training, a 21 percent differential. Workers with employer-provided training earn more than those without it.

Some caution should be used in interpreting these differences.

The relationship between education and training is likely also to hold for ability and training. Therefore, the earnings differential is likely to overstate the direct consequence of training for a particular individual. We estimate that the returns to training are large enough so that even if our estimates are halved, the rate of return still indicates that training is a profitable investment.

Discussion and Recommendations

Training has been a step child of the learning society.

Historically, work-bound youth acquired their training informally, and it was associated with "hands-on" learning. However, as the economy and nature of skill acquisition changed, training became more and more formalized and more frequently acquired. It also became more dependent on the basic educational competencies of the workers. Individuals who are able to read, write and compute with ease become the ones to be trained.

Training is a human capital investment that increasingly resembles formal education, so it is not surprising that those who receive more formal education also receive more training. However, training could,



in principle, be structured as an alternative to formal education. For those with a comparative disadvantage at learning in the classroom, it could be a viable avenue to compet. with those groups who start work with more formal education.

However, employer-provided training does not appear to be an alternative to formal education for acquiring productive skills. Our analysis shows, as have others, that work-bound youth receive less training than either non-degree participants or the college-bound. The probability of a work-bound youth getting any kind of training from any source is very low -- about 1 in 3.7 On the other hand, a work-bound youth who receives employer-provided training has substantially higher earnings than those who do not. This is not to say that work-bound youth are relatively "untrainable" or that it will not pay them to seek training. The public sector employs a much smaller percentage of the work-bound than the private sector, yet it is more likely to educate or train them.

What about training for women? Althoug. work-bound men and women in the private sector are equally likely to report participation in training, the duration for women is from 3/4 to 1/2 that of men. Public sector employees are generally more likely to participate in training than their private sector counterparts. However, public sector women are less likely to participate in training than public sector men. As women shoulder a greater portion of the burden of care for children and the elderly, the time at which training is offered may be more of an obstacle to long term employment of women. However, we believe relatively little training is offered after work hours rather than



during the workday, so "time constraints" are unlikely to explain the substantially smaller duration of training for women. Nor are these differences explained by differences in the occupational requirements of jobs held by men and women; within broad occupational classifications the duration of training for women remains substantially shorter than it is for men. Apparently, employers believe that the benefits from training are less for women than for men.

Regardless of gender, twice as many college graduates report receiving training during work hours, off-site, than work-bound youth. From the information we have, we do not know whether on- or off-site training is more expensive to employers. However, we do know that the cost of training college graduates (during work hours) is greater than it is for workers with less education and pay. Thus, the greater relative use of off-site training for college graduates suggests that it is relatively more productive to train college graduates off-site.

None of these analyses enable us to see any reason why public or private policies should be altered to compensate for the inequalities. We have evidence connecting recent participation in training to current earnings, and it is likely that it also is related to the growth in earnings. Knowledge is being generated at a faster rate than in the past and large gaps in basic education or technical skills is likely to hinder the future employment stability of individuals and hamper national economic growth.

A corrective step would involve substantially more training than is currently received by many in our work force. Before taking this step a number of questions deserve answers. Among them, the following:

- 1. If work-bound youth get the least amount of training, regardless of where they work and what work they do, and yet they make up the largest group of entry-level workers, would additional training improve their productivity?
- 2. Is it possible to design training programs that compensate for the educational deficiencies individuals have? How can training programs address the issue of educational pre-requisites?
- 3. If the future work force will have ever more women, and time remains a scarce commodity for those who are primary care takers as well as employees, can we develop training strategies that will optimize their productivity with the restraints of their dual function?



NOTES

- 1. A detailed but more technical discussion of these and other r. sults can be found in Alsalam (1989).
- 2. We define the "college-bound" as those who eventually graduate from college. We define the "non-degree participants" as those who participate in the post-secondary education system, but do not receive a bachelor's degree. They may receive licenses, certificates, or associate degrees.
- 3. There are two opposing forces are work. First, employers want their employees to become trained and more productive quickly and so will want to train their employees soon after they start. Second, training cannot precede the new technology or skill the training is designed to impart, so the longer an employee has been with a particular employer the more likely he is of participating in training. The first determines the participation rate within the first six months to a year after starting work. The second determines the rate of increase among workers with longer tenure.
- Our estimates of the prevalence of employer provided training is likely to be about 20 percent higher than estimates from other surveys based on participation in training within the first year on the job, and much higher than estimates based on participation within the last year independent of starting date.

- 5. The work-bound are by our definition those who have had no involvement in post-secondary education and so they are very unlikely to have received tuition/financial assistance -- in fact, only 2.8% have.
- 6. The self-employed earn the most and pull the work-bound average up to \$404 per week.
- 7. Moreover, as a work-bound youth grows older, the likelihood he will get training falls. Time and age does not mitigate initial differences in the likelihood of receiving training between educational classes.



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